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encoding a presenilin-1 protein in which an amino acid in the amino acid sequence set forth in SEQ ID NOS: 1 or 3 is substituted.

3. A non-human gene-mutated animal having a mutant presenilin-1 gene which comprises a DNA sequence as set forth in SEQ ID NOS: 2 or 4 encoding a mutant presenilin-1 protein which has one or more amino acid substitutions in the amino acid sequence as set forth in SEQ ID NOS: 1 or 3 at positions 79, 82, 96, 115, 120, 135, 139, 143, 146, 163, 209, 213, 231, 235, 246, 250, 260, 263, 264, 267, 269, 280, 285, 286, 290, 318, 384, 392, 410, 426, or 436.

4. A non-human gene-mutated animal having a mutant presenilin-1 gene which comprises a DNA sequence as set forth in SEQ ID NOS: 2 or 4 encoding a mutant presenilin-1 protein which has one or more amino acid substitutions in the amino acid sequence as set forth in SEQ ID NOS: 1 or 3 selected from the group consisting of A79V, V82L, V96F, Y115H, Y115C, E120K, E120D, N135D, M139V, M139T, M139I, I143F, I143T, M146L, M146V, H163Y, H163R, G209V, I213T, A231T, A231V, L235P, A246E, L250S, A260V, C263R, P264L, P267S, R269G, R269H, E280A, E280G, A285V, L286V, S290C, E318G, G384A, L392V, C410Y, A426P or P436S.

5. (Amended) A non-human gene-mutated animal having a mutant presenilin-1 gene which comprises a DNA having a sequence as set forth in SEQ ID NOS: 2 or 4 encoding a mutant presenilin-1 protein in which the isoleucine at position 213 of a presenilin-1 amino acid sequence as set forth in SEQ ID NOS: 1 or 3 is substituted with an amino acid other than isoleucine.

6. (Amended) A non-human gene-mutated animal having a mutant presenilin-1 gene which comprises a DNA having a sequence as set forth in SEQ ID NOS: 2 or 4 encoding a mutant

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presenilin-1 amino acid sequence as set forth in SEQ ID NOS: 1 or 3 in which the isoleucine at position 213 is substituted with threonine.

7. (Twice Amended) The non-human gene-mutated animal according to claim 1, wherein a DNA sequence as set forth in SEQ ID NOS: 2 or 4 is mutated around base pair 639 to the following sequence:

5'-TGTGGTCGGGATGATMGCC ANC CACTGGAAAGGCCC-3'

wherein N represents a base other than T, M represents T or C, and the underlined bases encode the amino acid at position 213 of the amino acid sequence set forth in SEQ ID NOS: 1 or 3.

8. (Twice Amended) The non-human gene-mutated animal according to claim 1, wherein a DNA sequence as set forth in SEQ ID NOS: 2 or 4 is mutated around base pair 639 to the following sequence:

5'-TGTGGTCGGGATGATMGCC ANC CACTGGAAAGGCCC-3'

wherein N represents C, M represents T or C, and the underlined bases encode the amino acid at position 213 of the amino acid sequence set forth in SEQ ID NOS: 1 or 3.

9. (Twice Amended) The non-human gene-mutated animal according to claim 1, wherein a DNA sequence as set forth in SEQ ID NOS: 2 or 4 is mutated around base pair 639 to the following sequence:

5'-TGTGGTCGGGATGATMGCC XYZ CACTGGAAAGGCCC-3'

wherein XYZ represents a codon as triplet bases which encodes an amino acids other than isoleucine, M represents T or C, and the underlined bases encode the amino acid at position 213 of the amino acid sequence set forth in SEQ ID NOS: 1 or 3.

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19. (Amended) A plasmid comprising a DNA or a part thereof, wherein said DNA has a sequence as set forth in SEQ ID NOS: 2 or 4 wherein the sequence is mutated around base pair 639 to the following sequence:

5'-TGTGGTCGGGATGATMGCC ANC CACTGGAAAGGCCC-3'

wherein N represents A, G, or C, M represents T or C, and the underlined bases encode an amino acid at position 213 of the amino acid sequence set forth in SEQ ID NOS: 1 or 3.

20. (Amended) A plasmid comprising a DNA or a part thereof, wherein said DNA has a sequence as set forth in SEQ ID NOS: 2 or 4 wherein the sequence is mutated around base pair 639 to the following sequence:

5'-TGTGGTCGGGATGATMGCC XYZ CACTGGAAAGGCCC-3'

wherein M represents T or C, XYZ denotes a codon as triplet bases encoding an amino acid other than isoleucine, and the underlined bases encode the amino acid at position 213 of the amino acid sequence set forth in SEQ ID NOS: 1 or 3.

22. (Amended) A plasmid comprising a DNA wherein a Sau3AI site is introduced into a nucleotide sequence comprising the whole or a mutated part of a cDNA or chromosomal DNA of a mutant presenilin-1 gene encoding an amino acid set forth in SEQ ID NOS: 1 or 3 wherein position 213 is substituted with an amino acid other than isoleucine.

25. (Amended) A gene encoding a mouse mutant presenilin-1 protein having an amino acid sequence as set forth in SEQ ID NOS: 1 or 3 wherein the isoleucine at position 213 is substituted with an amino acid other than isoleucine in an amino acid sequence of a mouse presenilin-1 protein.

27. (Amended) A plasmid comprising: